

INTERNATIONAL SEARCH REPORT

International Application No

JP2005/000441

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 B22D19/00 F02F1/10

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B22D F02F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2002/157571 A1 (TAKEO ARAI ET AL) 31 October 2002 (2002-10-31)	4-6, 8
A	paragraphs '0015! - '0018! - paragraphs '0021!, '0022! paragraphs '0027!, '0028!; figures; tables 1,2	1-3, 7
Y	WO 03/095129 A1 (HONDA GIKEN KOGYO KABUSHIKI KAISHA) 20 November 2003 (2003-11-20)	4-6, 8
A	figures & EP 1 504 833 A (HONDA GIKEN KOGYO KABUSHIKI KAISHA) 9 February 2005 (2005-02-09) paragraphs '0020!, '0055!	1-3, 7
	----- -/--	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *G* document member of the same patent family

Date of the actual completion of the international search

25 May 2005

Date of mailing of the international search report

06/06/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Luta, D

INTERNATIONAL SEARCH REPORT

International Application No

/JP2005/000441

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 1 110 644 A (TEIPI INDUSTRY CO., LTD; TEIKOKU PISTON RING CO. LTD) 27 June 2001 (2001-06-27) paragraphs '0012! - '0015!; table 1	1-8
A	PATENT ABSTRACTS OF JAPAN vol. 1997, no. 03, 31 March 1997 (1997-03-31) -& JP 08 290255 A (TOYOTA MOTOR CORP), 5 November 1996 (1996-11-05) abstract; figures	1-8
A	US 2003/000086 A1 (FUGANTI ANTONIO ET AL) 2 January 2003 (2003-01-02) paragraphs '0014!, '0015!; figures 2-4	1-3

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

JP2005/000441

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2002157571 A1	31-10-2002	JP 2002248544 A CA 2373587 A1	03-09-2002 23-08-2002
WO 03095129 A1	20-11-2003	JP 2003326353 A JP 2003326346 A AU 2003235881 A1 EP 1504833 A1	18-11-2003 18-11-2003 11-11-2003 09-02-2005
EP 1504833 A	09-02-2005	JP 2003326353 A JP 2003326346 A AU 2003235881 A1 EP 1504833 A1 WO 03095129 A1	18-11-2003 18-11-2003 11-11-2003 09-02-2005 20-11-2003
EP 1110644 A	27-06-2001	JP 3253605 B2 JP 2001170755 A DE 60004770 D1 DE 60004770 T2 EP 1110644 A1 US 2001004498 A1	04-02-2002 26-06-2001 02-10-2003 08-07-2004 27-06-2001 21-06-2001
JP 08290255 A	05-11-1996	JP 3161301 B2	25-04-2001
US 2003000086 A1	02-01-2003	IT T020000130 A1 AT 244613 T CA 2397204 A1 DE 60100457 D1 DE 60100457 T2 EP 1253985 A1 ES 2202276 T3 WO 0158621 A1	10-08-2001 15-07-2003 16-08-2001 14-08-2003 27-05-2004 06-11-2002 01-04-2004 16-08-2001